

Name: \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

Use **substitution** to solve the system of equations:

$y = -2x + 1$ $y = -x + 2 \quad (-1, 3)$	$y = -3x + 5$ $y = 2x - 10$ $\begin{array}{r} -3x + 5 = 2x - 10 \\ +3x + 10 \quad +3x + 10 \\ \hline 15 = 5x \end{array}$ $\frac{15}{5} = \frac{5x}{5}$ $3 = x$ <p>Substitute <math>x=3</math> into <math>y=2x-10</math></p> $y = 2(3) - 10 = -4$ <p><math>y=-4</math> therefore <math>(3, -4)</math></p>
$y = 2$ $y = 2x - 3$	$x = -4$ $y = 2x - 1$
$y = -x + 8$ $y = 2x - 7 \quad (5, 3)$	$y = -x$ $y = -2x - 2$

$$4x + 3y = 13$$

$$y = -x + 4$$

Substitute  $y = -x + 4$  into  $4x + 3(y) = 13$

$$4x + 3(-x + 4) = 13$$

$$x + 12 = 13$$

$$x = 1$$

Substitute  $x = 1$  into  $y = -x + 4$

$$y = -(1) + 4 = 3$$

$$y = 3 \text{ therefore } (1, 3)$$

$$2x - y = -1$$

$$y = 3x \quad (1, 3)$$

$$y = -3x$$

$$x + 6y = 38 \quad (2, -6)$$

$$y = x - 9 \quad (8, 1)$$

$$x + y = 7$$

$$x + 2y = 4$$

$$-x + y = -7 \quad (6, -1)$$

$$x - y = 6$$

$$2x - 4y = 28 \quad (-2, -8)$$